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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,932	11/18/2003	Francis R. Corrado	42P17159	6401

8791 7590 02/21/2007  
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EXAMINER

VERBRUGGE, KEVIN

ART UNIT PAPER NUMBER

2189

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/716,932

Applicant(s)

CORRADO ET AL.

Examiner

Kevin Verbrugge

Art Unit

2189

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Response to Amendment***

This final Office action is in response to the amendment received 8/25/06 which amended claims 1, 3, 9, 11, 17, 19, 25, and 27. Claims 1-29 are pending. All objections and rejections not repeated below are withdrawn. The amendments overcome the rejections of record.

### ***Specification***

The abstract of the disclosure is objected to because the term "expensive" should be replaced with --inexpensive-- to correct a presumed typographical error. Additionally, the abstract should be amended to include the amended material added to the claims to keep it in line with the claimed invention. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-9, 11-17, and 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,732,230 to Johnson et al.

Regarding claims 1, 9, 17, and 25, Johnson discloses a method of automatically migrating information from a source to an assemblage of structured data carriers (partial title). His invention addresses the same problem presented by Applicants: the conventional method of converting a non-RAID hard disk into a RAID disk array required a large, external separate backup device (see Fig. 1, column 1, lines 24-28, and column 5, line 49 to column 6, line 5).

Johnson's device automatically migrates information from a non-RAID source data carrier 100 to a new RAID array 34 (see Fig. 2 and column 6, lines 24-34). During this process, Johnson's device carries out the claimed issuing of read and write requests since data is read and written as it is migrated.

Johnson does not explicitly mention whether his system permits operating system processes to receive or issue requests to access other portions of the data while the reading and writing are occurring, however, neither do the claims require such a function. The language of the claims is such that if no request to access is received or issued by the operating system processes, the claim is anticipated. In other words, when the conditional "if" clause is false, the claim is anticipated as long as the other elements are present, and they are present in Johnson's device, so the claim is anticipated. That is to say that in the simplest case, when Johnson's device performs

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the migration of data and no other requests for access are present during the migration, the if statement is false and the claim is anticipated.

Regarding claims 3, 4, 11, 12, 19, and 20, Johnson clearly mentions parity check data at column 3, lines 15-49 and column 11, line 27.

Regarding claims 5, 13, and 21, Johnson's storage devices are mass storage devices as claimed.

Regarding claims 6-8, 14-16, and 22-24, Johnson discloses the claimed operations throughout his disclosure (see for example, column 6, lines 28-34; column 12, lines 45-51; column 13, lines 49-62; and column 14, lines 38-46).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 10, 18, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,732,230 to Johnson et al.

Regarding claims 2, 10, and 18, as stated above, Johnson does not explicitly mention whether his system permits operating system processes to receive or issue requests to access other portions of the data while the reading and writing are occurring. However, he teaches that his migration occurs “automatically” and “independently” (see column 6, line 25; column 7, line 46; column 7, line 65 through column 8, line 9; column 8, line 67 through column 9, line 4; column 10, line 66 through column 11, line 2; column 14, lines 42-46), implying that his system permits operating system processes to receive and issue requests to access data while the reading and writing of the migration are occurring. In other words, since the migration is automatic and independent of the operating system processes, it is likely that they are allowed to access the data while the reading and writing of the migration is going on.

In any case, it would have been obvious to one of ordinary skill in the art at the time the invention was made to permit the operating system processes to access the data while the reading and writing of the data migration is happening because that provides a more accessible source of data to the user. Preventing the user from accessing the data during migration might cause unacceptable delays in providing the desired information and the skilled artisan would obviously make every effort to avoid such inconvenience.

Regarding claims 26-29, Johnson does not mention the claimed circuit board elements, however, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to include them in Johnson's system as typical circuit board components commonly found in computer systems like Johnson's.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

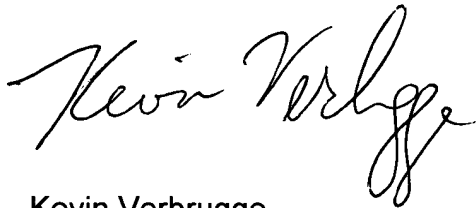
Any inquiry concerning this Office action should be directed to the Examiner by phone at (571) 272-4214.

Any response to this Office action should be labeled appropriately (including serial number, Art Unit 2189, and type of response) and mailed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, hand-carried or delivered to the

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Customer Service Window at the Randolph Building, 401 Dulany Street, Alexandria, VA 22313, or faxed to (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

A handwritten signature in black ink, reading "Kevin Verbrugge". The signature is fluid and cursive, with the first name "Kevin" and last name "Verbrugge" clearly distinguishable.

Kevin Verbrugge  
Primary Examiner  
Art Unit 2189